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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/919,701      | 07/31/2001  | Scott D. Sturgeon    | 10014835 -1         | 5394             |

7590

09/03/2002

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 09/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/919,701

Applicant(s)

STURGEON ET AL.

Examiner

Michael P Nghiem

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2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 19 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

The Amendment filed June 19, 2002 has been acknowledged.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-5, 8-16, 21-23, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazawa et al. (US 6,250,750).

Miyazawa et al. discloses all the claimed features of the invention including:

- an inkjet printer (column 1, lines 6-8) comprising:
- a chassis (body of printer);
- a motor (mechanism for moving carriage);
- a carriage (101) for an inkjet printer (column 1, lines 6-8) comprising:

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- a first mounting portion (150); a printhead (118) operably secured to said first mounting portion (Figs. 12's);
- a second mounting portion (includes 115) pivotally secured to said first mounting portion at a pivot point (pivot point of 115, Figs. 12's);
- an ink reservoir (120) operably secured to said second mounting portion in a secured position (120 secured on 116) and having an engaged position in which the ink reservoir is in fluid communication with said printhead when said ink reservoir is in said secured position (Fig. 12d), and an open position (12b), in which the second mounting portion is pivoted about said pivot point away from said first mounting portion and said ink reservoir remains in said secured position (120 remains secured on 116, Fig. 12b) thereby pivoting said ink reservoir about said pivot point away from the printhead and providing easy access to the printhead without detaching said ink reservoir from said second mounting portion (Fig. 12b);
- a plurality of ink reservoirs (120, 200);
- a plurality of printheads (heads for each 120, 200);
- wherein one of each plurality of ink reservoirs is in fluid communication with a respective one of each plurality of printheads in said engaged position (Figs. 11, 12's);
- a channel (119) extending between said ink reservoir and said printhead in said engaged position (Fig. 12d);
- said channel is substantially air tight when said carriage is in said engaged position such that a vacuum formed in the channel will cause ink to flow (Fig. 12d), and

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said channel is not substantially air tight when the carriage is moved out of its engaged position, thereby preventing ink from flowing through the channel (Fig. 12b);

- said first mounting portion is a printhead mounting-portion (bottom of 150) and said second mounting portion is an ink reservoir mounting-portion (includes 115); and wherein said printhead mounting-portion is pivotally secured to said ink reservoir mounting-portion at said pivot point (Figs. 12's);

- wherein said printhead mounting-portion is pivotally secured to said ink reservoir mounting-portion at said pivot point (Fig. 12d);

- a resistive detent (106a) on one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's);

- a tab (116) extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion for operably engaging said resistive detent when said carriage is in said open position (Figs. 12's), thereby holding the carriage in said open position to further facilitate removal of the printhead (Figs. 12's);

- a shaft (117) extending from one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's), said shaft having a mating end portion (106);

- a mating hole (opening of 106) for receiving said shaft in the other of said printhead mounting-portion and said ink reservoir mounting-portion (Fig. 12b), said mating hole including a notch for operably receiving said mating end portion of said shaft only when said printhead mounting-portion and said ink reservoir mounting-portion are in a defined position with respect to each other (Figs. 12's);

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- a latching mechanism (112) for detachably securing said printhead mounting portion to said ink reservoir mounting-portion (Fig. 12d);

- said latching mechanism includes:

- a handle (left handle of 112) pivotally secured to one of said printhead mounting-portion and said ink reservoir mounting-portion at a pivot (bottom convex of 112);

- a joining arm (right portion of 112) extending from said handle;

- a hook (notch engaging 105) for receiving said joining arm extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion such that said hook operably engages said joining arm when said handle is pivoted about said pivot (Fig. 12d);

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 17-20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al. in view of Oda et al. (US 5,552,816).

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Miyazawa et al. further discloses the following claimed features of the invention:

- said ink reservoir is detachably secured to said ink reservoir mounting-portion (Figs. 12's);
- positioning the carriage in the printer such that it is easily accessible through an access door (110) on the printer.

However, Miyazawa et al. does not disclose the following claimed features:

- said printhead is detachably secured to said printhead mounting-portion;
- removing the first printhead from the carriage;
- installing the second printhead in the carriage such that the second printhead is operably secured to the carriage.

Nevertheless, Oda et al. discloses a printhead (H) being detachably secured to a printhead mounting-portion (C, Fig. 1) for the purpose of preventing the printhead to be removed before removing the ink tank (T).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Miyazawa et al. with a detachable printhead as disclosed by Oda et al. for the purpose of preventing the printhead to be removed before removing the ink tank (T). It would be obvious to remove the old printhead before installing a new printhead.

***Response to Arguments***

3. Applicant's arguments filed June 19, 2002 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that no structures in Miyazawa teach or suggest pivoting an ink reservoir about a pivot point while keeping the ink reservoir operably engaged in a secure position on a mounting portion of the carriage.

Examiner's position is that Miyazawa teaches pivoting an ink reservoir (120) about a pivot point (pivot point of 115) while keeping the ink reservoir operably engaged in a secure position (secure position of 120 on 116) on a mounting portion (115, 116) of the carriage.

Applicants further argue that Miyazawa neither teaches nor suggests any ink reservoirs remaining in a secure position on a second mounting portion when that mounting portion is moved away from a first mounting portion containing a printhead.

Examiner's position is that Miyazawa teaches an ink reservoir (120) remaining in a secure position on a second mounting portion (120 secured on 116) when that mounting portion is moved away from a first mounting portion containing a printhead (Fig. 12b, 120 still remains on 116 when 120 is moved away from the first mounting portion of the printhead).



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With respect to the 35 USC 103 rejections, Applicants argue that Oda teaches away from an ink reservoir remaining seated in its mount but is still movable out of the way to provide easy access to such a detachable printhead.

Examiner's position is that Miyazawa teaches an ink reservoir remaining seated in its mount but is still movable out of the way to provide easy access to a printhead (Fig. 12b). Oda teaches that a printhead may be detachable for the purpose of being replaced. Thus, in combination, they teach the claimed invention.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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**Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hilten can be reached at (703) 308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
MICHAEL NGHIEM  
PRIMARY EXAMINER

Michael Nghiem

August 29, 2002